



# State of Utah

m/045/017

February 27, 1992

**CERTIFIED MAIL**

(Return Receipt Requested)

Mr. Frank W. Wicks, General Manager  
Barrick Mercur Gold Mine  
P.O. Box 838  
Tooele, Utah 84074

RE: Reservation Canyon Tailings Impoundment  
NOTICE OF VIOLATION and ORDER  
TO SUBMIT PLANS AND  
INFORMATION

Dear Mr. Wicks:

Transmitted herewith is a Notice of Violation and Order from the Utah Water Quality Board for your immediate attention. This order is a response to the spill from your tailings impoundment reported on Monday, February 17, 1992.

If you have any questions concerning this order please contact myself or Dennis Frederick at 538-6146.

Sincerely,

Utah Water Quality Board

A handwritten signature in dark ink, appearing to read "Don A. Ostler", is positioned below the title.

Don A. Ostler, P.E.  
Executive Secretary

Mr. Frank W. Wicks, General Manager

Page 2

February 27, 1992

Enclosure

DAO:DAF:

cc: Ken Alkema, Dept. of Environmental Quality  
Doug Crudell, Asst. Attorney General  
Glen Eurick, Barrick  
Ken Bousefield, Division of Drinking Water Quality  
Wayne Hedberg, DOGM  
Glade Shelly, Utah County Health Dept.  
Myron Bateman, Tooele County Health Dept.  
David Bird, Parsons, Behle & Latimer

Q:BARRICK4.I.TR

FILE:GROUND WATER BARRICK TAILINGS IMPOUNDMENT

## UTAH WATER QUALITY BOARD

---

IN THE MATTER OF	:	DOCKET NUMBER GW92-02
BARRICK RESOURCES (USA) INC.	:	NOTICE OF VIOLATION
MERCUR MINE	:	AND ORDER
TOOELE, UTAH	:	
	:	

---

### STATUTORY AUTHORITY

*The Utah Water Quality Board ("Board") issues this Notice of Violation and Order under the Water Quality Act (the "Act"), including subsections 19-5-104 and -105 and -106 and -111 and -115, Utah Code Annotated (hereinafter "The Code"), and in accordance with the Utah Administrative Procedures Act, subsections 63-46b-1, et seq.*

### FINDINGS

1. **BARRICK RESOURCES** (hereinafter **BARRICK**) operates a tailings impoundment facility for the disposal of processed ore from its gold milling operation. The facility is located in Mannings Canyon at the Tooele/Utah County border in Section 5 of Township 6 S. and Range 3 W. Such operation includes a reclaim water pond constructed between the existing saddle dam and the tailing impoundment pool.
2. The Mannings Canyon area is a recharge zone for wells and springs in the area of Fairfield City, located approximately six miles downgradient of Barrick's operation. These ground waters and surface drainages in the vicinity of Barrick's operation including Mannings Canyon and its tributaries are considered "waters of the state" as per "The Code" 19-5-102(16).
3. The *Utah Water Quality Act* states that it is unlawful for any person to "place or cause to be placed any wastes in a location where there is probable cause to believe it will cause pollution. Any such action is a public nuisance," "The Code" 19-5-107(1).
4. In accordance with "The Code" 19-5-107(2)(a), it is unlawful to "make any discharge not authorized under an existing valid discharge permit." Furthermore, in accordance with the *Utah Administrative Code* (hereinafter *UAC*) R317-8-211, "The UPDES program requires permits for the discharge of pollutants from any point source into waters of the State." In accordance with *UAC* R317-6-6.1A, "No person may construct, install, modify, or operate any new facility ... which discharges or would probably result in a discharge of pollutants that may move directly or indirectly into ground water ... without an approved ground water discharge permit issued by the Executive Secretary."
5. **BARRICK** has no UPDES discharge permit for discharge to Mannings Canyon. Other than Permit No. UGW450001 for dump leach #3, **BARRICK** has no ground water discharge permit for discharge in the Mannings Canyon area.

6. The following unpermitted discharges of pollutants have occurred:

- A. Beginning at or before 7:45 a.m. of February 17, 1992, Barrick discharged cyanide contaminated water from the reclaim pond. The discharge was finally controlled at 11:45 a.m. During the known four hour period of the discharge **BARRICK** estimates 250,000 gallons of cyanide contaminated water was released at a concentration of approximately 14,000 ug/L.
- B. A discharge from a lined containment pond located below the reclaim water pond continued until February 19, 1992. The total cyanide concentration from a sample collected by the Division of Water Quality on February 18, 1992 of this discharge was 18,370 ug/L. Further analysis of this sample shows this discharge has the potential to adversely impact public health and the environment due to concentrations of the following contaminants:

Contaminant	Ground Water Quality Standard (mg/L)	3B Stream Standard (mg/L)	Concentration of Sample (mg/L)	% Excess of Ground Water Quality Standards	% Excess of 3B Stream Standard
pH	8.5 units	9.0 units	8.6 units	NA	NA
Cadmium	0.01	.039	.096	860%	150%
Mercury	0.02	0.024	.100	400%	320%
Cyanide	0.2*	0.022	19.58	9,700%	88,900%
Sulfate	500	NA	829	66%	NA

a) EPA Health Advisory  
NA - Not Applicable

7. Under UAC R317-1.26, "Treatment works" means any plant, disposal field, lagoon, dam, pumping station, incinerator, or other works used for the purpose of treating or holding wastes.
8. In accordance with "The Code" 19-5-107(2)(b), it is unlawful to operate any treatment works "the operation of which would probably result in a discharge," without first securing a permit.
9. In accordance with UAC R317-1-27, the facility must be operated in a manner consistent with the protection of public health.
10. In accordance with UAC R317-1-2.1, it is unlawful to discharge wastewater in violation of State Water Quality Law.
11. **BARRICK** operated the Reclaim Water Pond in such a manner that resulted in the discharges

identified in **FINDING 6**, above.

12. In accordance with UAC R317-1-2.2, a construction permit must be obtained from the **BOARD** prior to the construction or modification of any device for the treatment or discharge of wastewater.
13. The modifications that were made to the reclaim water pond, without first securing a permit, included the construction of a gravity feed reclaim water line that was later improperly abandoned and provided a conduit for the discharge of reclaim pond water to the "waters of the state".
14. In accordance with UAC 317-2-7.1, it is unlawful to cause any of the water quality standards of the State to be violated. The Jordan River and its tributaries (Mannings Canyon, et. al.) are classified as 3B, as per UAC R317.2. As per UAC R317-2-14.2, the water quality criteria for 3B aquatic wildlife protection for total cyanide is 22 ug/L for one hour average and 5.2 ug/L for a four day average. The EPA Drinking Water Health Advisory limit for cyanide in drinking water is 200 ug/L.
15. In accordance with "The Code" 19-5-114, "Any person who spills or discharges any oil or other substance which may cause the pollution of waters of the state shall *immediately* notify the Executive Secretary [of the Utah Water Quality Board] of the spill or discharge."
16. **BARRICK** became aware of the spill event at 7:45 A.M. of February 17, 1992, but did not report it until 3:15 P.M. of February 17, 1992.

**VIOLATIONS**

**BARRICK is in VIOLATION of**

1. "The Code" 19-5-107(1), for placing wastes in a location where there is a probable cause to believe pollution will result, pursuant to **FINDINGS 1, 3, 6.**
2. "The Code" 19-5-107(2)(a), for having unpermitted discharges to both surface and ground water, pursuant to **FINDINGS 4, 5, 6.**
3. "The Code" 19-5-107(2)(b), for operation of a facility which would probably result in a discharge without a permit, pursuant to **FINDINGS 4, 7, 8, 12, 13.**
4. UAC R317-1-2.7, for violation of State water quality standards, pursuant to **FINDINGS 6, 14.**
5. UAC R317-1-2.1, for failure to comply with State water quality law, pursuant to **FINDINGS 4, 5, 6, 7, 12 through 15.**
6. UAC R-317-1-2.7, for operation of a facility not consistent with adequate protection of public health, pursuant to **FINDINGS 2, 3, 7 through 16.**
7. UAC R-317-1-2.2, for failure to obtain a construction permit for the modifications or construction of a treatment works, pursuant to **FINDINGS 7, 8, 11, 12, 13.**
8. "The Code" 19-5-114, for failure to immediately notify the Executive Secretary of an ongoing spill event, pursuant to **FINDINGS 15, 16.**

**ORDER**

**BARRICK is hereby ordered to:**

1. Immediately comply with the foregoing and with any other applicable water quality laws and regulations.
2. Submit a report to the Executive Secretary within fifteen (15) days of receipt of this **ORDER**. To include an explanation of the spill event, and a full disclosure of actions taken and/or planned to be taken, including a schedule, in order to comply with this **ORDER**.
3. Immediately pump all water from the containment and reclaim water pond into the tailings impoundment. **BARRICK** shall until further notice immediately pump all water that enters the reclaim water or containment pond into the tailings impoundment. **BARRICK** is not authorized to use either of these locations for the storage or treatment of any waste, direct precipitation, or runoff from adjacent areas. **BARRICK** shall certify in writing that this portion of the order has been implemented within 7 days of receipt of this notice.

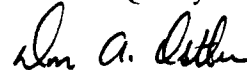
4. Immediately remove or permanently cap the water conveyance system that runs from the reclaim water pond to the valve pit.
5. Submit plans, in accordance with the provisions of "The Code" 19-5-114, to conduct a study to characterize the extent of the contamination. These plans shall be adequate to determine appropriate corrective actions and must be submitted to the Executive Secretary for approval within 30 days of receipt of this notice. These plans shall include a compliance schedule for the study components, selection of a proposed corrective action, and implementation of appropriate remedial efforts. **BARRICK** shall make an assessment of whether or not the water quality at the compliance monitoring wells, at the tailings impoundment and dump leach #2, will be impacted by the spill.
6. The plans referenced above in No. 5 shall include the development of a long term monitoring study plan to assess future impacts from this discharge. This plan shall also detail measures **BARRICK** will take to provide for the monitoring of wells and springs used for culinary or agricultural purposes, located downgradient from their tailings impoundment. Upon approval of this plan, **BARRICK** shall implement the plan and provide written reports of their findings as per a schedule dictated in the approved plan.
7. Minimize any further adverse impacts to the environment. Restoration of eroded areas shall begin when the snow melts. Notification of impacted property owners and downstream surface or ground water users shall be made immediately.

**NOTICE:** Any further administrative proceedings in this case shall be conducted formally, under Utah Code Annotated subsections 63-46b-6 through 63-46b-14, inclusive; and R317-1-8, Utah Administrative Code. If you want to contest this Notice of Violation and Order, you must respond to it in writing and request a hearing from the Board. The Response And Request For Hearing must be received by the Executive Secretary within 30 days of the date of receipt of this Notice of Violation and Order. If no response and request for hearing is received, the Notice of Violation and Order shall be considered final.

Under Utah Code Annotated Section 19-5-115, one who violates the Act or a related permit, rule, or order may be subject to a civil penalty of up to \$10,000 per day of violation. Under certain circumstances of willfulness or gross negligence, violators may be fined up to \$25,000 per day.

Dated this 27<sup>th</sup> day of February, 1992.

Utah Water Quality Board



Don A. Ostler, P.E.

Executive Secretary